

Amendment to the Claims:

This listing of claims will replace all versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method to manage multiple format fonts in an image generating device, in a document processing device controller, comprising the steps of:

receiving a management request from an associated user workstation via an associated data network to store a font in a selected storage area of the image generating device;

receiving, from the networked workstation, non-bitmapped font data corresponding to a received management request;

determining, from the received font data, the type of font to be stored;

selectively generating a new, non-bitmapped font file such that:

when the font to be stored is a PostScript font, pre-appending selected PostScript language code to the PostScript font data to create a new font file inclusive of a PostScript Language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a [[PCL]] printer command language font, pre-appending selected [[PJL]] printer job language software commands to the [[PCL]] printer command language font data to create a new font file inclusive of a [[PJL]] printer job language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a supported font other than a PostScript font or [[PCL]] printer command language font, converting the font to a [[PCL]] printer command language font and pre-appending selected [[PJL]] printer job language software commands to the converted [[PCL]] printer command language font data to create a new font file inclusive of a portion comprised of the selected [[PJL]] printer job

language software commands and a font data portion containing the received font data in its native form, and

when the font to be stored is an unsupported font, returning an error message to the associated user;

communicating font data and appended printer job language software commands to a raster image processor inclusive of commands operative to instruct the raster image processor relative to decoding the font data;

parsing, via the raster image processor, a printer job language software command from font data to which it has been pre-appended;

decoding the font data, via the raster image processor, from instructions disposed in parsed printer job language software commands;

rasterizing the new, non-bitmapped font file in accordance with the received non-bitmapped font file and ~~pre-appended code~~ in accordance with font data decoded in the raster image processor in accordance with the instructions;

storing, in a storage disposed on a controller of the image generating device, the rasterized font file in an associated data storage for rendering of associated electronic document data;

receiving electronic document data into a spooler disposed on the image generating device;

receiving a document imaging request corresponding to electronic document data stored in the spooler;

testing font specification data in accordance with the font file data stored in the associated data storage;

retrieving a font data file from the associated storage in accordance with the step of testing; and

commencing a rendering operation on [[the]] electronic document data in the spooler in conjunction with the retrieved rasterized font data file.

2. (Cancelled)

3. (Previously Presented) The method according to claim 1 further comprising the step of storing the rendered document in the selected storage area.

4. (Original) The method according to claim 1 wherein the management request is received from an associated user via at least one of a simple management network protocol and a web administration user interface.

5. (Original) The method according to claim 1 wherein the image generating device is selected from the group consisting of a printing device, a facsimile device, a copying device, and a video display device.

Claims 6-12 (Cancelled)

13. (Currently amended) A method to manage multiple format fonts in an image generating device, in a document processing device controller, comprising the steps of:

receiving a management request from an associated user workstation via an associated data network;

determining the type of management request received;

upon a determination that the management request received is a request to store a font in a selected storage area of the image generating device:

receiving, from the networked workstation, non-bitmapped font data corresponding to a received management request,

determining, from the received font data, the type of font to be stored,

selectively generating a new, non-bitmapped font file such that:

when the font to be stored is a PostScript font, pre-appending selected PostScript language code to the PostScript font data to create a new font file inclusive of a PostScript Language code portion and a font data portion containing the received font data in its native form;

when the font to be stored is a [[PCL]] printer command language font, pre-appending selected [[PJL]] printer job language software commands to the [[PJL]] printer job language font data to create a new font file inclusive of a [[PJL]] printer job language code portion and a font data portion containing the received font data in its native form;

when the font to be stored is supported font other than a PostScript font or [[PCL]] printer command language font, converting the font to a [[PCL]] printer command language font and pre-appending selected [[PJL]] printer job language software commands to the converted [[PCL]] printer command language font data to create a new font file inclusive of a portion comprised of the selected [[PJL]] printer job language software commands and a font data portion containing the received font data in its native form, and

when the font to be stored is an unsupported font, returning an error message to the associated user;

communicating font data and appended printer job language software commands to a raster image processor inclusive of commands operative to instruct the raster image processor relative to decoding the font data;

parsing, via the raster image processor, a printer job language software command from font data to which it has been pre-appended;

decoding the font data, via the raster image processor, from instructions disposed in parsed printer job language software commands;

rasterizing the new, non-bitmapped font file in accordance with the non-bitmapped font file and pre-appended code in accordance with font data decoded in the raster image processor in accordance with the instructions;

storing, in a storage disposed on a controller of the image generating device, a rasterized font file in an associated data storage for rendering of associated electronic document data,

receiving electronic data into a spooler disposed on the image generating device,

receiving a document imaging request corresponding to electronic document data stored in the spooler,

testing, in the controller, font specification data in accordance with the font file data stored in the associated data storage,

retrieving a font data file from the associated storage in accordance with the step of testing, and

commencing a rendering operation on electronic document data in the spooler in conjunction with a retrieved rasterized font data file;

upon a determination that the management request received is to remove a selected font from a selected storage area of an image generating device:

creating a new file which includes a selected command and the font to be removed,

determining if the selected font is stored in the storage area, and

upon a determination that the selected font is stored in the storage area, removing the selected font from the storage area, and

upon a determination that the management request received is to locate a selected type of font stored in a selected storage area of the image generating device:

determining if the selected type of font is stored in the storage area,

generating a list of fonts corresponding to the selected type of font, and

transmitting the list of fonts to the associated user via at least one of displaying the list of fonts on a display means or generating test documents listing the fonts.

14. (Original) The method according to claim 13 wherein the management request is received from an associated user via at least one of a simple management network protocol and a web administration user interface.

15. (Original) The method according to claim 13 wherein the image generating device is selected from the group consisting of a printing device, a facsimile device, a copying device, and a video display monitor.

16. (Currently amended) A system to manage multiple format fonts in an image generating device, in a document processing device controller, comprising:

means adapted for receiving a management request from an associated user workstation via an associated data network, to store a font in a selected storage area of the image generating device;

means adapted for receiving, from the networked workstation, non-bitmapped font data corresponding to a received management request;

means adapted for determining the type of font to be stored;

means adapted for selectively generating a new, non-bitmapped font file such that:

when the font to be stored is a PostScript font, means adapted for pre-appending selected PostScript language code to the PostScript font data to create a new font file inclusive of a PostScript Language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a [[PCL]] printer command language font, means adapted for pre-appending selected [[PJL]] printer job language software commands to the [[PCL]] printer command language font data to create a new font file inclusive of a [[PJL]] printer job language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a supported font other than a PostScript font or [[PCL]] printer command language font, means adapted for converting the font to a [[PCL]] printer command language font and means adapted for pre-appending selected [[PJL]] printer job language software commands to the converted [[PCL]] printer command language

font data to create a new font file inclusive of a portion comprised of the selected [[PJL]] printer job language software commands and a font data portion containing the received font data in its native form, and

when the font to be stored is an unsupported front, returning an error message to the associated user;

means adapted for communicating font data and appended printer job language software commands to a raster image processor inclusive of commands operative to instruct the raster image processor relative to decoding the font data;

means adapted for parsing, via the raster image processor, a printer job language software command from font data to which it has been pre-appended;

means adapted for decoding the font data, via the raster image processor, from instructions disposed in parsed printer job language software commands;

means adapted for rasterizing the new, non-bitmapped font file in accordance with the received non-bitmapped font file ~~and pre-appended code in accordance with font data decoded in the raster image processor in accordance with the instructions;~~

means adapted for storing, in a storage disposed on a controller of the image generating device, a generated rasterized font file in an associated data storage for rendering of associated electronic document data;

means adapted for receiving an electronic document data into a spooler disposed on the image generating device;

means adapted for receiving a document imaging request corresponding to electronic document data in the spooler;

means adapted for testing font specification data in accordance with the font file data stored in the associated data storage;

means adapted retrieving a font data file from the associated storage in accordance with the testing; and

means adapted for commencing a rendering operation of electronic document data in the spooler in conjunction with a retrieved rasterized font data file.

17. (Cancelled)

18. (Previously Presented) The system according to claim 16 further comprising means adapted for storing the processed file in the selected storage area.

19. (Original) The system according to claim 16 wherein the management request is received from an associated user via at least one of a simple management network protocol and a web administration user interface.

20. (Original) The system according to claim 16 wherein the image generating device is selected from the group consisting of a printing device, a facsimile device, a copying device, and a video display device.

Claims 21-27 (Cancelled)

28. (Currently amended) A system to manage multiple format fonts in an image generating device comprising:

- means adapted for receiving a management request from an associated user workstation via an associated data network;

- means adapted for determining the type of management request received;

- upon a determination that the management request received is a request to store a font in a selected storage area of the image generating device:

- means adapted for receiving, from the networked workstation, non-bitmapped font data corresponding to a received management request;

- means adapted for determining the type of font to be stored;

- means adapted for selectively generating a new non-bitmapped font file
- such that:

- when the font to be stored is a PostScript font, means adapted for pre-appending selected PostScript language code to the PostScript font data to create a new font file inclusive of a PostScript Language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a [[PCL]] printer command language font, means adapted for pre-appending selected p [[PJL]] rinter job language software commands to the [[PCL]] printer command language font data to create a new font file inclusive of a [[PJL]] printer job language code portion and a font data portion containing the received font data in its native form,

when the font to be stored is a supported font other than a PostScript font or printer command language font, means adapted for converting the font to a [[PCL]] printer command language font and means adapted for pre-appending selected [[PJL]] printer job language software commands to the converted [[PCL]] printer command language font data to create a new font file inclusive of a portion comprised of the selected [[PJL]] printer job language software commands and a font data portion containing the received font data in its native form; and

when the font to be stored is an unsupported font, returning an error message to the associated user;

means adapted for communicating font data and appended printer job language software commands to a raster image processor inclusive of commands operative to instruct the raster image processor relative to decoding the font data;

means adapted for parsing, via the raster image processor, a printer job language software command from font data to which it has been pre-appended;

means adapted for decoding the font data, via the raster image processor, from instructions disposed in parsed printer job language software commands;

means adapted for rasterizing the new, non-bitmapped font file in accordance with the received non-bitmapped font file and pre-appended-code in accordance with font data decoded in the raster image processor in accordance with the instructions;

means adapted for storing, in a storage disposed on a controller of the image generating device, a generated rasterized font file in an associated data storage for rendering of associated electronic document data;

means adapted for receiving an electronic document data into a spooler disposed on the image generating device;

means adapted for receiving a document imaging request corresponding to electronic document data stored in the spooler;

means adapted for testing font specification data in accordance with the font file data stored in the associated data storage;

means adapted retrieving a font data file from the associated storage in accordance with the testing; and

means adapted for commencing a rendering operation of electronic document data in the spooler in conjunction with a retrieved rasterized font data file;

upon a determination that the management request received is to remove a selected font from a selected storage area of an image generating device:

means adapted for creating a new file which includes a selected command and the font to be removed,

means adapted for determining if the selected font is stored in the storage area, and

upon a determination that the selected font is stored in the storage area, means adapted for removing the selected font from the storage area; and

upon a determination that the management request received is to locate a selected type of font stored in a selected storage area of the image generating device:

means adapted for determining if the selected type of font is stored in the storage area,

means adapted for generating a list of fonts corresponding to the selected type of font, and

means adapted for transmitting the list of fonts to the associated user via at least one of displaying the list of fonts on a display means or generating test documents listing the fonts.

29. (Original) The system according to claim 28 wherein the management request is received from an associated user via at least one of a simple management network protocol and a web administration user interface.

30. (Original) The system according to claim 28 wherein the image generating device is selected from the group consisting of a printing device, a facsimile device, a copying device, and a video display monitor.

Claims 31-38 (Cancelled)